APPENDIX E
JOINT ENGINEER DOCTRINE

1. Joint Engineer Doctrine. The joint organization staff and functions provided in Figures E-1 and E-2 are provided as notional and do not necessarily reflect actual CINC or Joint Staff organizations. In peacetime, the joint engineer staff is small and usually located within the J-4. This tends to color engineer issues at the joint level as logistics support versus the Army view that a substantial and vital portion of the facilities that engineers provide is operational support not logistics support.

2. CINC Authorities. The CINC and combatant commanders are accountable to the NCA for the execution of their assigned missions. To that end, they are given certain command and control authorities over the forces assigned for the execution of those missions. Normally, the CINC exercises his/her authority through his/her component commanders.

a. Combatant Command. This authority includes organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction over all aspects of military operations, joint training, and logistics necessary to accomplish the missions assigned to the command.

b. Directive Authority for Logistics. This authority supports the combatant commander's responsibility to effectively execute operational plans, maintain effectiveness and economy of operation, and prevent duplication of facilities and resources. The military departments are still responsible for logistics and administrative support of forces assigned or attached to the combatant commands. This authority allows the CINC to set construction policy, general priorities, balance resources as necessary and assure that logistics supports the concept of operations.

3. Joint Responsibilities. The CINC's joint engineer staff sets theater-level policies and priorities for construction, assesses civil engineer requirements against capabilities in the context of the CINC's concept of operations and prepares civil engineer support plans. Component commanders generate priorities and

requirements for facilities and construction projects to support both operational and logistics requirements. In general, CINC and component commanders have the same priorities; however, translation of those priorities into actual projects are not always the same among services -- nor do they have to be. The component engineer commanders execute construction missions in accordance with CINC overall guidance and component priorities. The CINC staff may set the relative priorities among the component commanders.

4. Standards of Construction. There are two standards of construction in joint doctrine:

a. Initial standard facilities are austere, require minimal engineer effort and are intended to provide support to operations for up to six months. Tents and aggregate-surfaced roads fall into this category.

b. Temporary standard facilities are more durable than initial standard facilities, increase the efficiency and effectiveness of the users and are intended to provide support to operations for up to two years. Wood frame structures fall into this category.

c. A third, unofficial term, "expedient construction," can be described as quick and dirty. Clearing and grubbing or a temporary repair may fall into this definition.

d. By its nature, some forms of construction transcend these standards of construction, such as some commercial building systems which are quickly erectable but also have longer lives than envisioned for the theater of operations. The key is minimization of engineer effort and logistics requirements.

5. Environment. DOD Directive 6050.7, 31 March 1979, "Environmental Effects Abroad of Major Department of Defense Actions" and DOD Directive 6050.16, 20 September 1991, "DOD Policy for Establishing Environmental Standards at Overseas Installations" guide contingency environmental policy for CINC in executing missions OCONUS.

a. In general, all civil engineering operations will be conducted in compliance with host nation or U.S. standards on OCONUS installations operated by the U.S.

b. In contingency operations, attention will be given to environmental considerations. Even in war, action should be taken to temporarily store hazardous materials for subsequent removal or treatment, to protect the local environment from long term damage, and to assure that we do no environmental harm to the local populace.

6. Command and Control. The Services have responsibility for logistics and administrative support to their Service forces assigned or attached to joint commands.

a. Many functions are performed by one Service for all Services. This may be accomplished one of two ways.

(1) Common Servicing. One Service supports other Services without charge. The Army is responsible for distribution of bulk fuels, food, and other common materiel to land forces.

(2) Cross-Servicing. One Service supports other Services and may charge. This is the service that USACE, as a DOD CCA, provides in real estate and contract construction services.

b. The CINC have the authority to task Services to provide support. In addition, the CINC may establish joint staff organizations to oversee critical areas of functional support. These organizations are usually staffed from the component commands. They are formed to assure consistency among the component commanders, resolve inter-Service issues and balance resources, if necessary. CINC establish boards as a last resort because they create another layer of bureaucracy and require additional time for the resolution of issues.

(1) The Theater or Regional Contingency Engineering Management (TCEM and RCEM, respectively) concept, when implemented, is used as an augmentation to the CINC's or joint subordinate organization's engineer staff. The TCEM/RCEM function is to continuously analyze the CINC's concept of operations and assure that the theater-level engineering effort supports that concept. Included in this responsibility is participation in CINC planning, assessing the adequacy of engineer forces in theater, and promulgating CINC guidance concerning construction policies.

(2) A Joint Civil-Military Engineering Board (JCMEB) may be activated by the CINC to establish policies, procedures, priorities, and overall direction for construction and engineering requirements in theater. Normally, this board would only be necessary in a very large theater with multiple RCEMs and a large theater-level engineer mission.

(3) A Joint Facilities Utilization Board (JFUB) manages allocation of existing facilities (host nation or U.S. owned/ operated) to meet facility requirements within the theater.

c. Joint Task Force (JTF) Operations. A JTF is composed of units or elements of two or more component commands organized to execute a specific mission. A JTF tends to be relatively small and functions for a limited period of time. JTFs are the common form of CINC response to significant contingencies.

(1) Most Service doctrine and command and control concepts support large force operations and their support requirements. Most of the Army's combat service (CS) and combat service support (CSS) force structure is in the reserve components. Since activation of reserve components for contingency operations is infrequent and active duty CS/CSS forces are inadequate, JTFs usually consist of active maneuver units augmentated by contractor(s) (i.e., LOGCAP).

(2) The JTF Engineer may have both a coordinating staff responsibility and an execution responsibility. This is possibly due to the small number of engineer tasks to execute and small number of engineers available for execution. Due to the small engineer staff at the CINC level, the JTF engineer and staff may be selected from components and CONUS commands. Thus, the JTF staff may have to organize itself while also planning, deploying and executing the operation.

(a) The JTF Engineer and staff may have the following JTF staff duties:

- Conduct engineer planning in coordination with the JTF Staff.
- Monitor the conduct of engineer operations.
- Provide staff oversight of topographic engineering activities.

- Monitor the status of Class IV and critical engineer equipment.

- Promulgate CINC Environmental policy.

(b) The JTF Engineer may be supported by a separate staff and have the following execution responsibilities:

- Exercise OPCON of all engineer construction units assigned.

- Coordinate all mission and tasking assignments to units.

- Exercise OPCON of the supporting USACE forward USACE(Fwd) element.

(c) The structure described above requires that supporting organizations and their people must be flexible and versatile. USACE personnel deployed in support of a JTF: must understand the military system; should be able to simultaneously address multiple issues; must be able to readily communicate with higher headquarters; must respond quickly to requirements; should provide sound advice to commanders who are not familiar with leasing regulations and contractor capabilities; and should be capable of living in an austere environment. The USACE(Fwd) commander has the following responsibilities:

- Command all USACE personnel in theater, less Prime Power assets assigned to the JTF.

- Organize and equip USACE(Fwd) to execute the following missions:

  - In-house/contract design
  - Contract construction
  - Real estate acquisition
  - Cost Estimation
  - Master planning
  - Project management
  - Support of unique engineer missions (e.g. water detection, security engineering, etc)
  - Technical engineering support
  - Finance and accounting support for MILCON

- Establish field/area offices as required to support engineer units and customers.

- Establish Forward Headquarters to provide:

- Minimum administrative support, policy guidance and technical support to field/area offices.

- Liaison personnel to customer Headquarters and the JTF. This may also include augmentation to the JTF Engineer Staff.

- When LOGCAP is activated, be ready to act as the Administrative Contracting Officer (ACO) for LOGCAP contract construction and logistics services and be ready to work with the Defense Contract Management Command, International (DCMC-I) when they assume the ACO role.

A JOINT STAFF ORGANIZATION

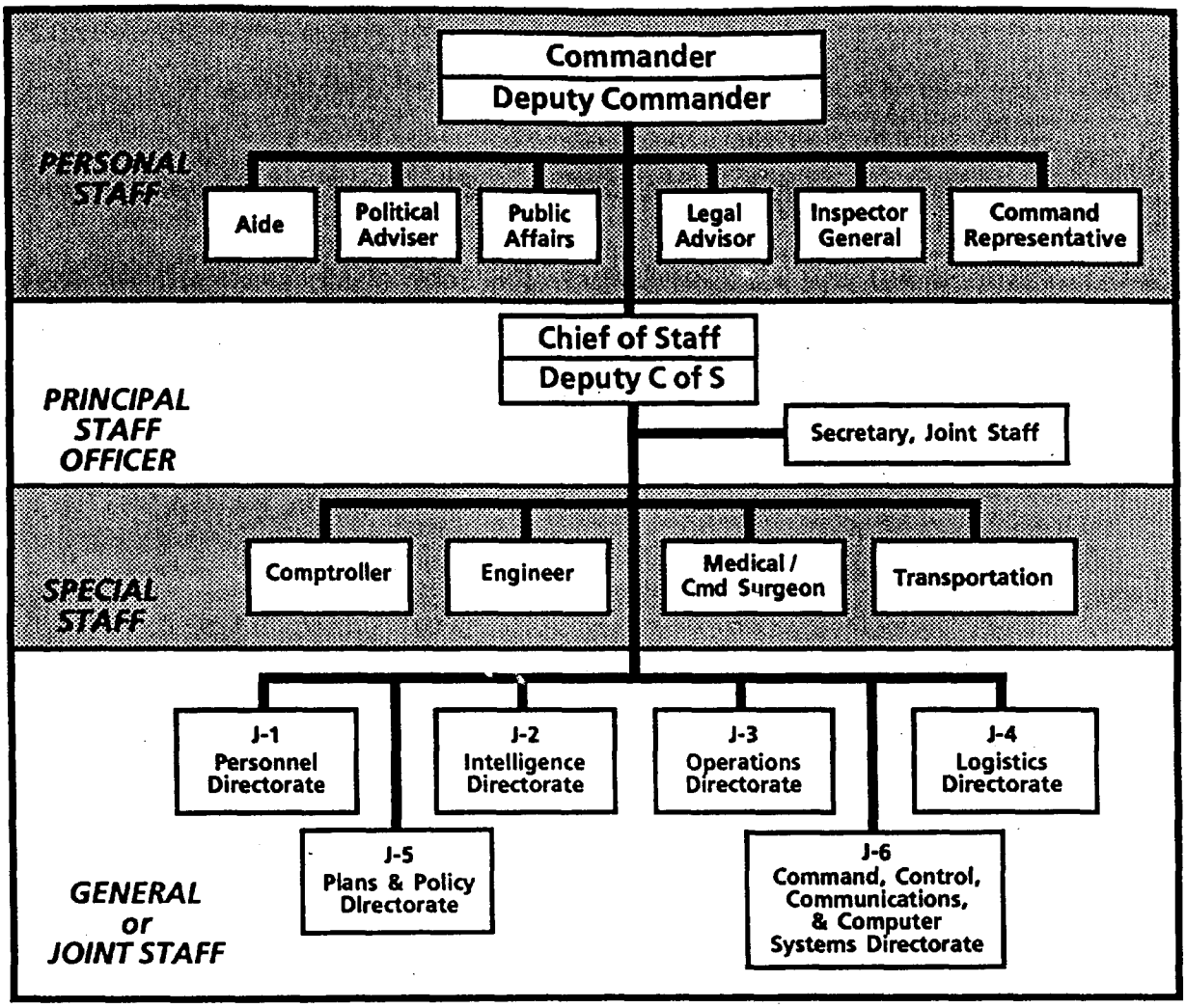

Figure E-1

FUNCTIONS OF JOINT STAFF DIVISIONS

DIRECTORATE OR DIVISION	RESPONSIBILITIES
MANPOWER AND PERSONNEL (J - 1)	• Manage manpower • Formulate personnel policies • Supervise administration of personnel, including civilians and prisoners of war
INTELLIGENCE (J - 2)	• Ensure availability of sound intelligence on area and enemy locations, activities, and capabilities • Direct intelligence efforts on proper enemy items of interest • Ensure adequate intelligence coverage and response • Disclose enemy capabilities and intentions
OPERATIONS (J - 3)	• Assist in direction and control of operations • Plan, coordinate, and integrate operations
LOGISTICS (J - 4)	• Formulate logistics plans • Coordinate and supervise supply, maintenance, repair, evacuation, transportation, construction, and related logistic matters • Ensure effective logistic support for all forces in the command
PLANS AND POLICY (J - 5)	• Assist commander in long-range or future planning • Prepare campaign and operation plans • Prepare estimates of the situation **J-5 functions may be included in operations directorate**
COMMAND, CONTROL, COMMUNICATIONS, AND COMPUTERS or COMMUNICATIONS-ELECTRONICS AND AUTOMATED SYSTEMS [J-6]	• Assist commander with responsibilities for communications-electronics and automated data systems • Prepare communications and data systems plans to support operational and strategic concepts • Furnish communications to exercise command in mission execution **J-6 functions may be included in operations directorate or in the special staff**
SPECIAL STAFF	• Give technical, administrative, and tactical advice • Prepare parts of plans, estimates, and orders • Coordinate and supervise staff activities **Special staff** may be included as branches of directorates
PERSONAL STAFF	• Responsible directly to the commander • Special matters over which the commander chooses to exercise close personal control • Usually includes the political adviser and public affairs

Figure E-2